S.No: 11	Exp. Name: ***A program to illustrate Inheritance***	Date:2023-10-16

Aim:

Write Java program on use of Inheritance.

Create a class Vehicle

- contains the data members **color** of String type and **speed** and **size** of integer data type.
- write a method **setVehicleAttributes()** to initialize the data members

Create another class Car which is derived from the class Vehicle

- contains the data members **cc** and **gears** of **integer** data type
- write a method **setCarAttributes()** to initialize the data members
- write a method **displayCarAttributes()** which will display all the attributes.

Write another class InheritanceDemo with **main()** it receives five arguments **color**, **speed**, **size**, **cc** and **gears**.

Source Code:

InheritanceDemo.java

```
class Vehical{
   String color;
   int speed,size;
   public void setVechicleAttributes(String col,int sp,int si){
      color=col;
      speed=sp;
      size=si;
   }
}
class Car extends Vehical{
   int cc,gears;
   public void setCarAttributes(int c,int ge){
      cc=c;
      gears=ge;

   }
   public void displayCarAttributes(){
      System.out.println("Color of Car : "+color);
      System.out.println("Speed of Car : "+speed);
       System.out.println("Size of Car : "+size);
      System.out.println("CC of Car : " +cc);
      System.out.println("No of gears of Car : " +gears);
   }
}

class InheritanceDemo{
   public static void main(String args[]){
      Car c =new Car();
      c.setVechicleAttributes(args[0],Integer.parseInt(args[1]),Integer.parseI
nt(args[2]));
      c.setCarAttributes(Integer.parseInt(args[3]),Integer.parseInt(args[4]));
      c.displayCarAttributes();
```

```
    }
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Color of Car : Blue
Speed of Car : 100
Size of Car : 20
CC of Car : 1000
No of gears of Car : 5

Test Case - 2
User Output
Color of Car : Orange
Speed of Car : 120
Size of Car : 25
CC of Car : 900
No of gears of Car : 5

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